

REMARKS

This Response is to the non-final Office Action dated November 1, 2006. Claims 1 to 34 are pending. Claims 1, 4 to 8, 11, 16, 23, 25, 28 and 34 have been amended herein. Claim 3 has been canceled without prejudice or disclaimer. The specification has been amended slightly. No new matter has been added via any of the amendments. Applicants believe that no fee is due in connection with this Response, however, please change Deposit Account No. 02-1818 for any fees deemed owed.

In the Office Action the specification at pages five and eight was objected to. Those minor errors and others in the specification have been corrected in this Response.

Claims 17 and 29 were rejected under 35 U.S.C. § 112, first and second paragraphs, for allegedly lacking enablement and particularity, respectively. Applicants respectfully traverse the enablement rejections. For example, page 6, lines 24 to 29 describe how a clock can keep track of the age of the tubing and how the tubing becomes more compliant or manipulable over time, resulting in a decreased need for motor current (page 7, lines 1 to 3). Page 10, lines 1 to 15 describe how “time-related factors” are accounted for. This section again references a clock. It then provides two possibilities to account for aged tubing. In one possibility, the system or method applies a time-dependent algorithm to a predetermined current value to arrive at a current value adjusted based on the age of the tubing. In another possibility, a database is queried to determine a current value appropriate to the elapsed time. The specification accordingly enables the claims in a multitude of ways.

Regarding clarity, Applicants respectfully submit that the term “responsive to changes in the age of tubing used for administering medication” used in both claims is clear on its face. That is, no term in the claim appears to be ambiguous or unsupported by the specification. The Office Action asserts that it is unclear how the motor controller is responsive to changes in the age of the tubing (page 3). As noted above, pages 6 and 7 of the specification unambiguously describe that the motor current responds to varying tubing age by altering current to the motor. The specification even describes that in general the response to aged tubing is a decrease in motor current. Further, the specification describes mechanism by which the system or method determines how much to vary the current, e.g., via an algorithm or data table. Applicants accordingly respectfully submit that claims 17 and 29 meet the requirements of 35 U.S.C. §112.

Regarding the prior art rejections, Claims 1, 2, 10, 11, 16, 19, 20, 23 and 24 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,855,660 to Wright et al. ("*Wright*"). Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright* and U.S. Patent 4,838,856 to Mulreany et al. ("*Mulreany*"). Claims 12, 13, 14, 15, 21, 22, 25, 26, 27, 28, 31, 32, 33 and 34 are rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright* and U.S. Patent No. 6,659,980 to Moberg et al. ("*Moberg*"). Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright*, *Mulreany* and *Moberg*. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright*, *Mulreany* and U.S. Publication No. 2003/0235409 to Harriman et al. ("*Harriman*"). Claim 9 is rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright* and U.S. Patent No. 6,208,107 to Maske et al. ("*Maske*"). Claim 18 is rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright* and *Harriman*. Claim 30 is rejected under 35 U.S.C. 103(a) as being obvious in view of *Wright*, *Moberg* and *Harriman*.

Regarding the rejection of claim 1 as being anticipated by *Wright*, Applicants respectfully submit that *Wright* does not mention a pump motor or pump cycle. Claim 1 provides for an infusion pump stepper motor and a pump cycle. Applicants accordingly, respectfully submit that the anticipation rejection of Claim 1 is improper for at least this reason.

Claim 1 has however been amended to provide that the electrical current value is determined in response, at least in part, to the position in the pump cycle and the flow rate as separate factors. Claim 1 as presently presented is clearly supported at least by Fig. 3 and associated text of the specification.

Mulreany at Fig. 3 shows that the output of flow meter 24 of *Mulreany* feeds into the position sensor 96, which outputs to control system 112 for processing. Control system 112 of *Mulreany* does not appear therefore to use the output of flow meter 24 and position sensor 96 as separate factors in determining a motor current.

Thus even if the position sensor of *Wright* and the flow meter of *Mulreany* are combinable, *Mulreany* teaches to use the flow meter and position sensor in a different way than as claimed. No teaching is provided in either reference to use the flow meter and position sensor as separate factors in determining the electrical current valve. Applicants accordingly submit

respectfully that claim 1, and claims 2 to 10 depending from Claim 1 are patentable over the art of record.

The amendments to Claims 4 to 8 are made for claim dependency purposes only and in no way to overcome the art of record or to distinguish any subject matter with respect to the art of record. Claim 3 has been cancelled without prejudice or disclaimer based on the amendment to Claim 1.

Regarding claims 11 to 25, no reference teaches a motor controller configured to determine whether a motor controller output should account for a sensor output. Claims 11 to 25 are clearly supported by at least Figs. 3 to 5 and associated text of the present application. Applicants accordingly respectfully submit that claims 11 and 25 are patentable over the art of record.

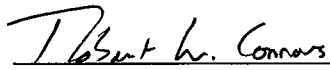
Claims 16, 23, 28 and 34 have been amended to be consistent with Claims 11 and 25 as presently presented and in no way to overcome the art of record or to disclaim any subject matter with respect to same.

The patentability of claims 1, 11 and 25 renders moot the various obviousness rejections of the dependent claims.

For the foregoing reasons Applicants submit respectfully that this case is in condition for allowance. If the Examiner has any questions regarding this case or Response, Applicants request that the attorney below be contacted. Again, the Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing.

Respectfully submitted,

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